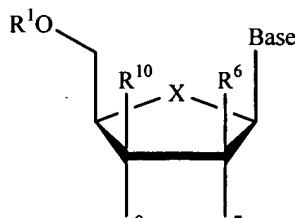


This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

Claims 1-88 (canceled)

Claims 89 (currently amended): A method for the treatment or prophylaxis of a hepatitis C virus infection in a host, comprising administering an anti-virally effective amount of a compound of Formula XVII:



(XVII)

or a pharmaceutically acceptable salt or ester thereof, wherein:

Base is a pyrrolopyrimidine purine or pyrimidine base as defined herein;

R<sup>1</sup> and R<sup>2</sup> are independently H; phosphate (including monophosphate, diphosphate, triphosphate, or a stabilized phosphate prodrug); a stabilized phosphate prodrug; acyl (including lower acyl); alkyl (including lower alkyl); sulfonate ester including alkyl or arylalkyl sulfonyl including methanesulfonyl and benzyl, wherein the phenyl group is optionally substituted with one or more substituents as described in the definition of aryl given herein; a lipid; including a phospholipids; an amino acid; a carbohydrate; a peptide; a cholesterol; or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein R<sup>1</sup> and R<sup>2</sup> are independently H or phosphate;

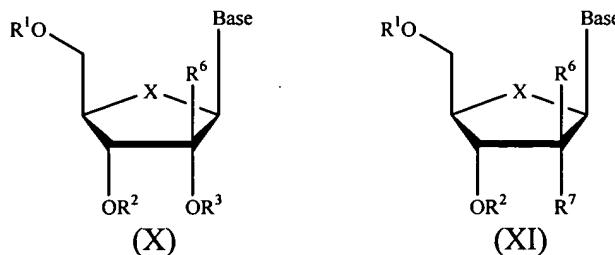
R<sup>6</sup> is hydrogen, hydroxy, alkyl (including lower alkyl), azido, cyano, alkenyl, alkynyl, Br-vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chloro, bromo, fluoro, iodo, NO<sub>2</sub>, NH<sub>2</sub>, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)<sub>2</sub>, or -N(acyl)<sub>2</sub>;

R<sup>7</sup> and R<sup>9</sup> are independently hydrogen, OR<sup>2</sup>, hydroxy, alkyl (*including lower alkyl*), azido, cyano, alkenyl, alkynyl, Br-vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chlorine, bromine, iodine, NO<sub>2</sub>, NH<sub>2</sub>, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)<sub>2</sub>, or -N(acyl)<sub>2</sub>;

R<sup>10</sup> is H, alkyl (*including lower alkyl*), chlorine, bromine or iodine; alternatively, R<sup>7</sup> and R<sup>9</sup>, or R<sup>7</sup> and R<sup>10</sup> can come together to form a bond; and X is O, S, SO<sub>2</sub> or CH<sub>2</sub>.

Claims 90-129 (canceled)

Claim 130 (new): The method of claim 89 for the treatment of a hepatitis C virus infection in a host, comprising administering an anti-virally effective amount of a compound of Formula X or XI:



or a pharmaceutically acceptable salt or ester thereof, wherein:

Base is a pyrrolopyrimidine;

R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are independently H; phosphate or a stabilized phosphate prodrug; acyl; alkyl; sulfonate ester; or benzyl, wherein the phenyl group is optionally substituted; a lipid; an amino acid; a carbohydrate; a peptide; cholesterol; or other pharmaceutically acceptable leaving group which when administered *in vivo* is capable of providing a compound wherein R<sup>1</sup>, R<sup>2</sup> and R<sup>3</sup> are independently H or phosphate;

R<sup>6</sup> is hydroxy, alkyl, azido, cyano, alkenyl, alkynyl, Br-vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chloro, bromo, fluoro, iodo, NO<sub>2</sub>, NH<sub>2</sub>, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)<sub>2</sub>, or -N(acyl)<sub>2</sub>;

R<sup>7</sup> is hydrogen, OR<sup>3</sup>, hydroxy, alkyl, azido, cyano, alkenyl, alkynyl, Br-vinyl, -C(O)O(alkyl), -C(O)O(lower alkyl), -O(acyl), -O(lower acyl), -O(alkyl), -O(lower alkyl), -O(alkenyl), chlorine, bromine, iodine, NO<sub>2</sub>, NH<sub>2</sub>, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)<sub>2</sub>, or -N(acyl)<sub>2</sub>; and  
X is O, S, SO<sub>2</sub> or CH<sub>2</sub>.

Claim 131 (new): The method of claim 89 for the treatment of a hepatitis C virus

infection in a host, wherein, in the compound of Formula XVII:

R<sup>10</sup> is H, alkyl, chlorine, bromine or iodine;

R<sup>7</sup> and R<sup>9</sup> are independently hydrogen, OR<sup>2</sup>, alkyl, alkenyl, alkynyl, Br-vinyl, O-alkenyl, chlorine, bromine, iodine, NO<sub>2</sub>, NH<sub>2</sub>, -NH(lower alkyl), -NH(acyl), -N(lower alkyl)<sub>2</sub>, or -N(acyl)<sub>2</sub>;

R<sup>6</sup> is alkyl, chlorine, bromine or iodine;

alternatively, R<sup>7</sup> and R<sup>9</sup>, or R<sup>8</sup> and R<sup>9</sup> can come together to form a bond; and

X is O, S, SO<sub>2</sub> or CH<sub>2</sub>.

Claim 132 (new): The method of claim 89 wherein R<sup>1</sup> is hydrogen or phosphate.

Claim 133 (new): The method of claim 89 wherein R<sup>2</sup> is hydrogen, acyl or alkyl.

Claim 134 (new): The method of claim 89 wherein R<sup>6</sup> is alkyl.

Claim 135 (new): The method of claim 89 wherein R<sup>7</sup> and R<sup>9</sup> are independently hydrogen, OR<sup>2</sup>, or hydroxy.

Claim 136 (new): The method of claim 89 wherein R<sup>7</sup> is hydroxy.

Claim 137 (new): The method of claim 89 wherein R<sup>9</sup> is hydroxy.

Claim 138 (new): The method of claim 89 wherein R<sup>7</sup> and R<sup>9</sup> are hydroxy.

Claim 139 (new): The method of claim 89 wherein R<sup>10</sup> is hydrogen.

Claim 140 (new): The method of claim 89 wherein X is O.

Claim 141 (new): The method of claim 89 wherein

R<sup>1</sup> is hydrogen or phosphate;

R<sup>2</sup> is hydrogen, acyl or alkyl;

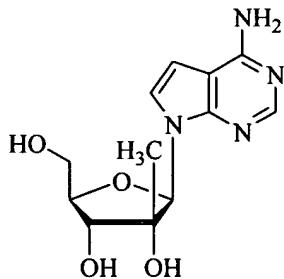
R<sup>6</sup> is alkyl;

R<sup>7</sup> and R<sup>9</sup> are independently hydrogen, OR<sup>2</sup>, or hydroxy;

R<sup>10</sup> is hydrogen; and

X is O.

Claim 142 (new): The method of claim 89 for the treatment of a hepatitis C virus infection in a host, comprising administering an antivirally effective amount of a compound of the structure:



or a pharmaceutically acceptable salt or ester thereof.

Claim 143 (new): The method of claim 89, wherein the method comprises administering the compound or a pharmaceutically acceptable salt or ester thereof in combination or alternation with a second anti-hepatitis C virus agent.

Claim 144 (new): The method of any one of claims 143, wherein the second anti-hepatitis C virus agent is selected from the group consisting of consisting of

interferon, ribavirin, a protease inhibitor, a thiazolidine derivative, a polymerase inhibitor, and a helicase inhibitor.

Claim 145 (new): The method of claim 144, wherein the second anti-hepatitis C virus agent is interferon.

Claim 146 (new): The method of claim 144, wherein the second anti-hepatitis C virus agent is a protease inhibitor.

Claim 147 (new): The method of claim 144, wherein the second anti-hepatitis C virus agent is ribavirin.

Claim 148 (new): The method of claim 89, wherein the compound is in the form of a dosage unit.

Claim 149 (new): The method of claim 148, wherein the dosage unit contains 50 to 1000 mg of said compound.

Claim 150 (new): The method of claim 148, wherein said dosage unit is a tablet or capsule.

Claim 151 (new): The method of claim 89, wherein the host is a human.

Claim 152 (new): The method of claim 89, wherein the compound is in substantially pure form.

Claim 153 (new): The method of claim 89, wherein the compound is at least 90% by weight of the  $\beta$ -D-isomer.

Claim 154 (new): The method of claim 89, wherein the compound is at least 95% by weight of the  $\beta$ -D-isomer.